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Figure 1

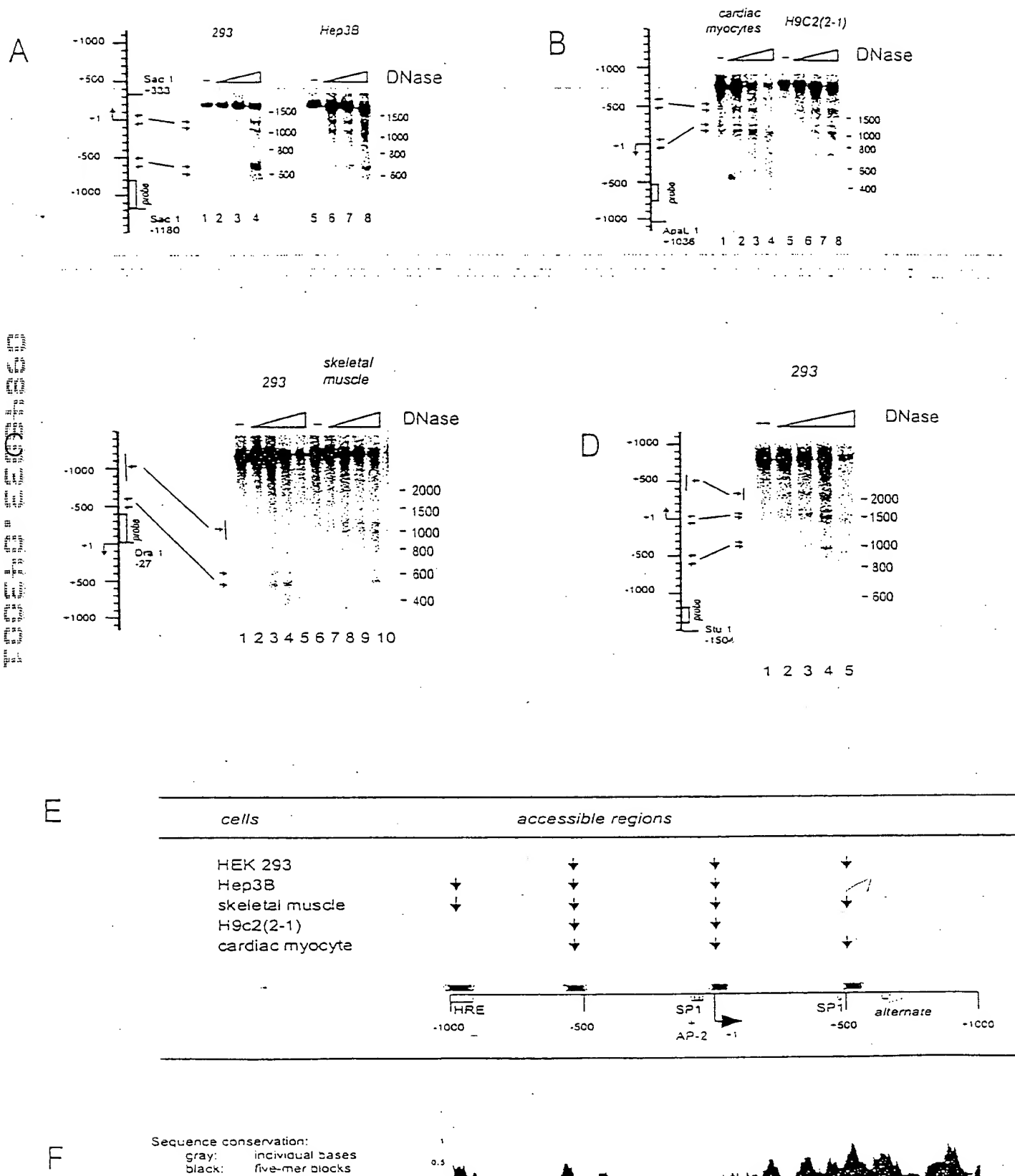
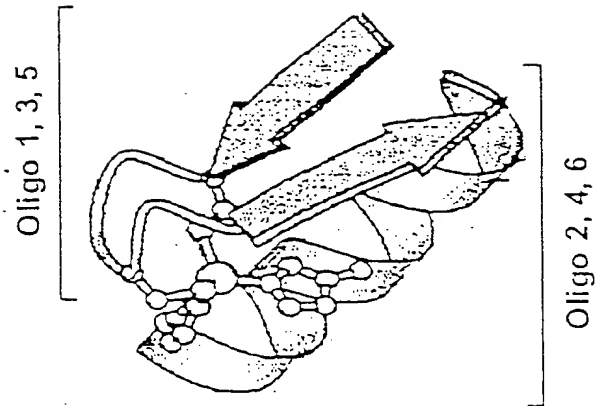
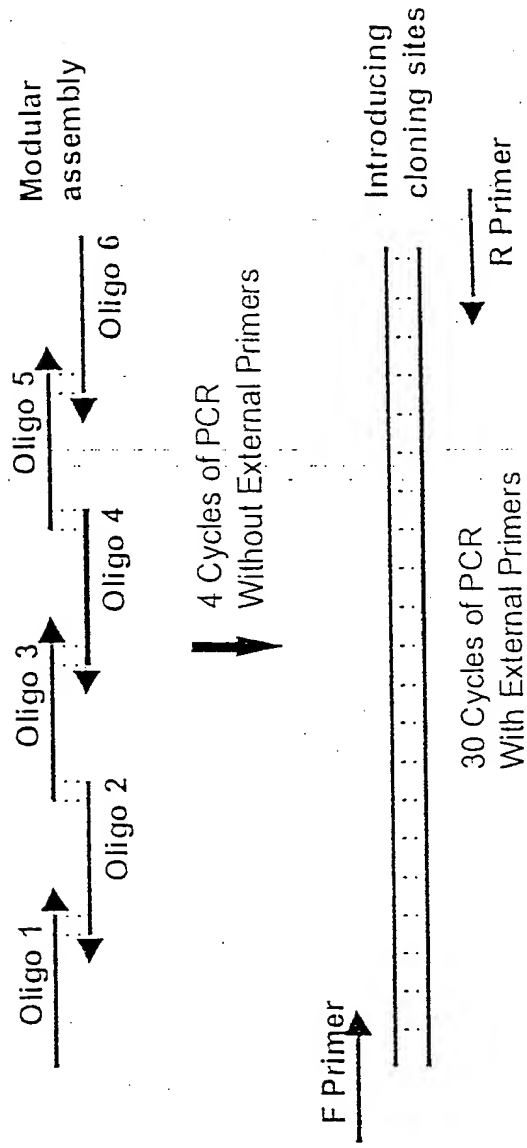


Figure 2

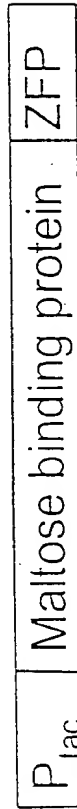
A



B

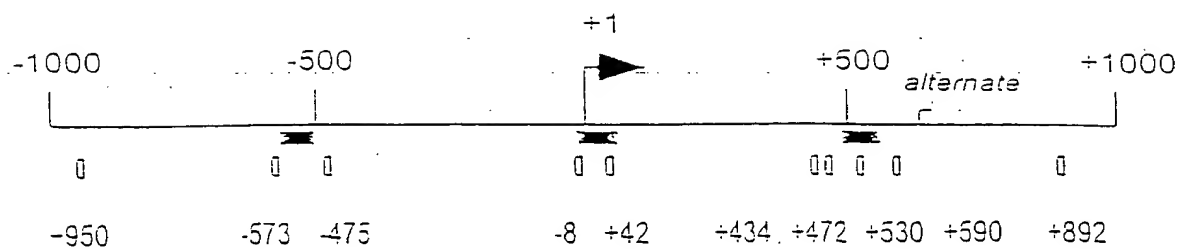


C



# Figure 2

D



1000  
900  
800  
700  
600  
500  
400  
300  
200  
100  
0  
-100  
-200  
-300  
-400  
-500  
-600  
-700  
-800  
-900  
-1000

Figure 3

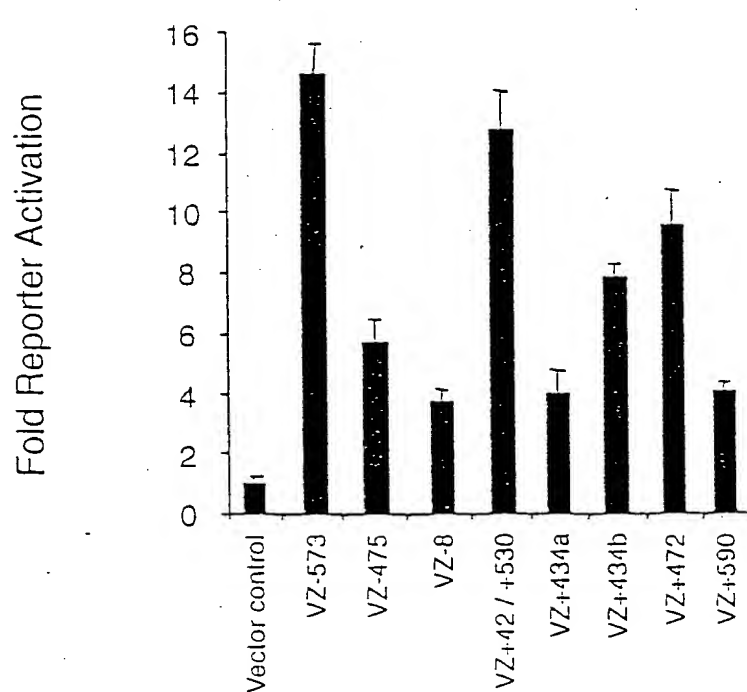
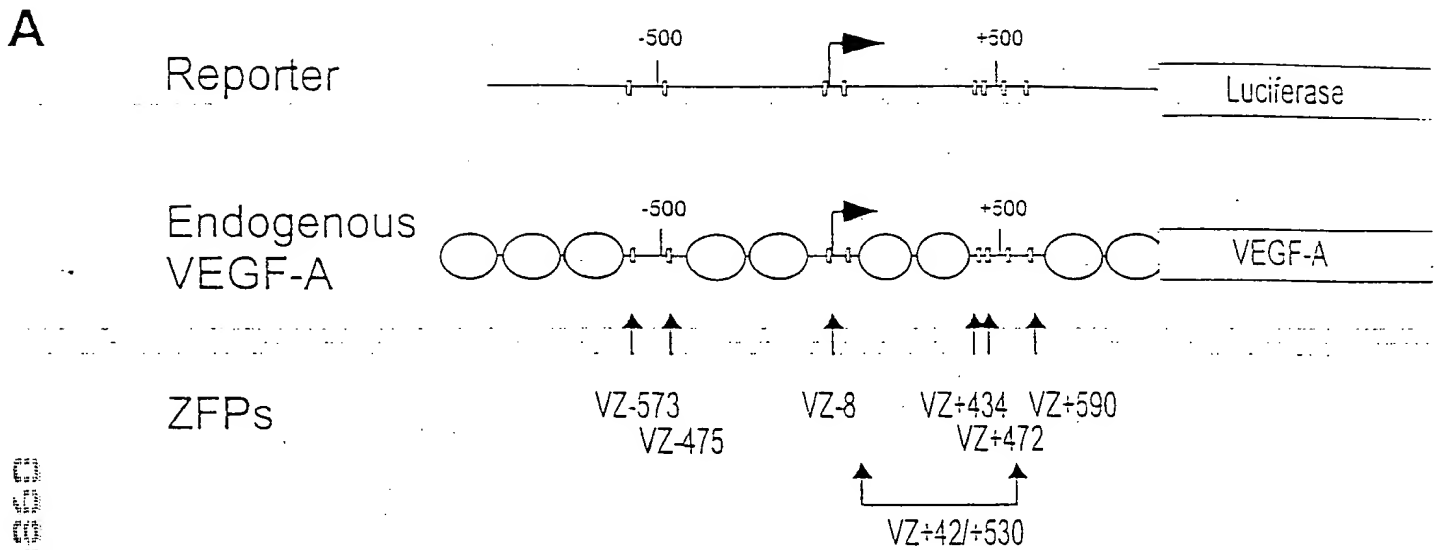
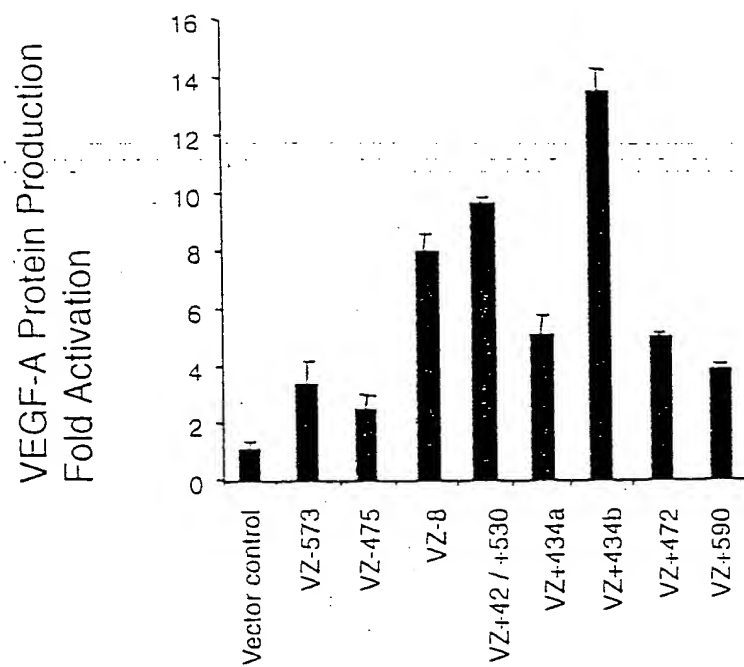


Figure 3

C



D

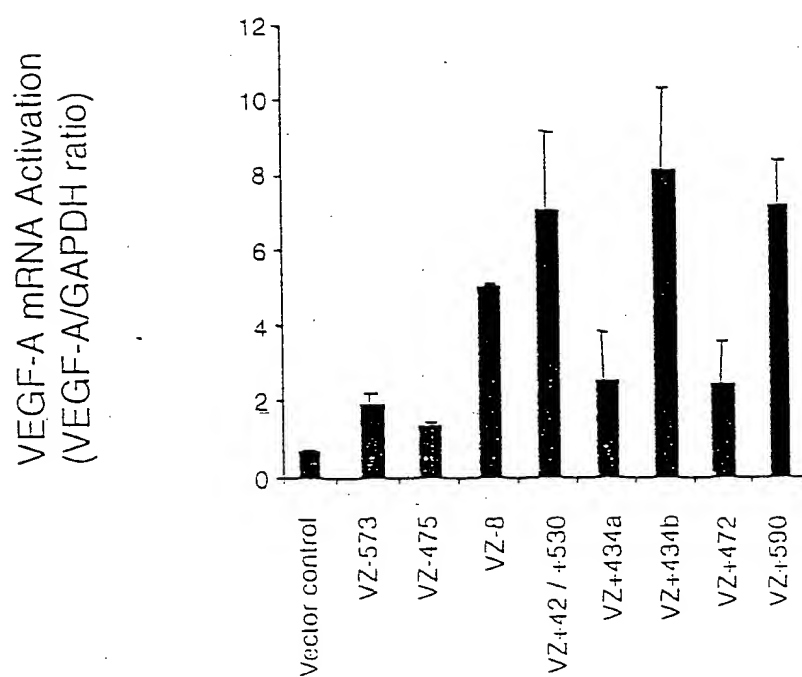
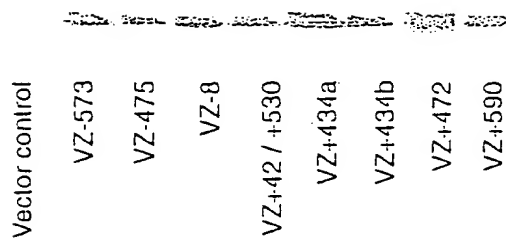


Figure 3

E

ZFP  
Protein



F

Relative ZFP mRNA levels  
(VP16 / GAPDH by Taqman)

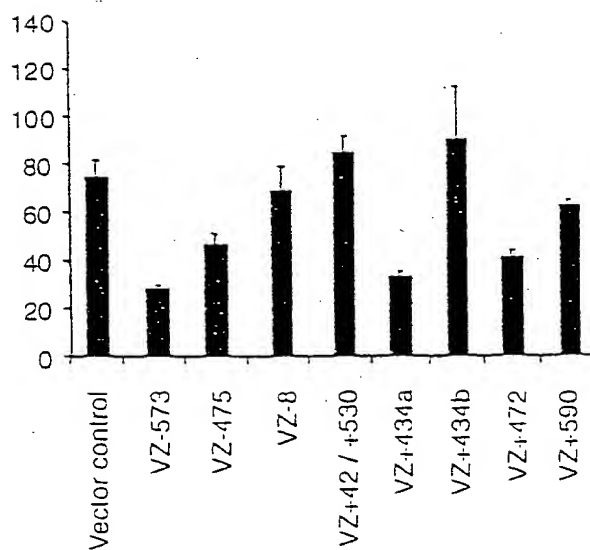
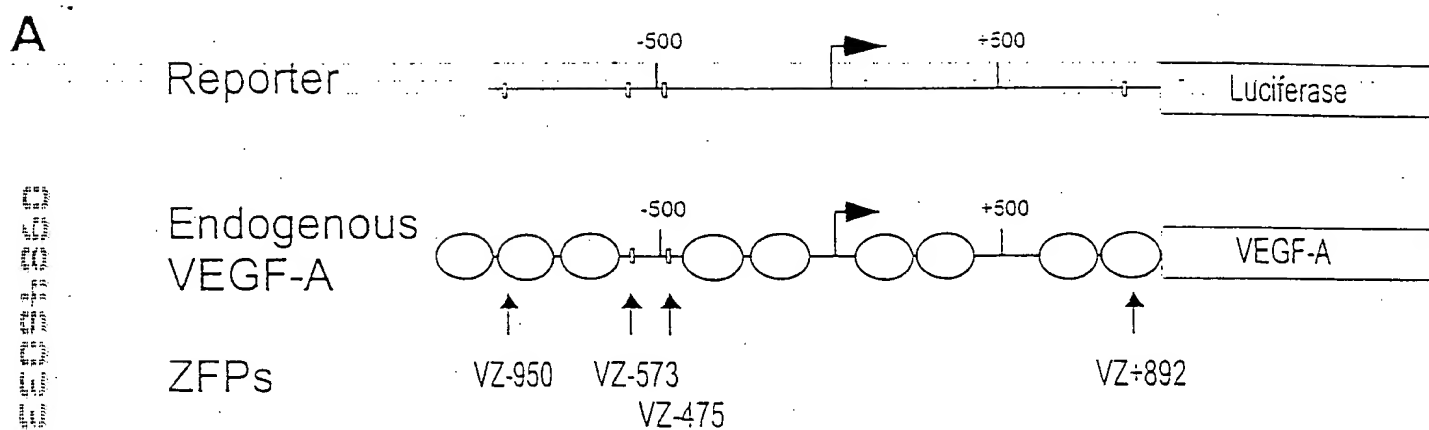
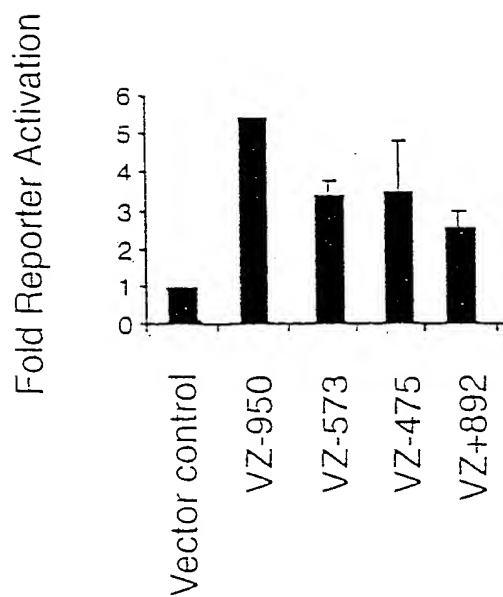


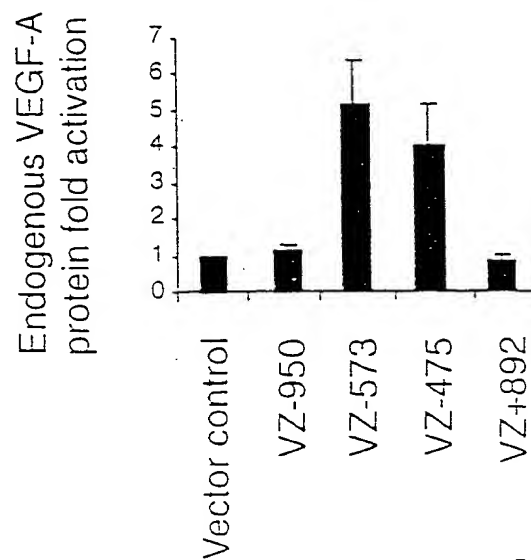
Figure 4



**B**

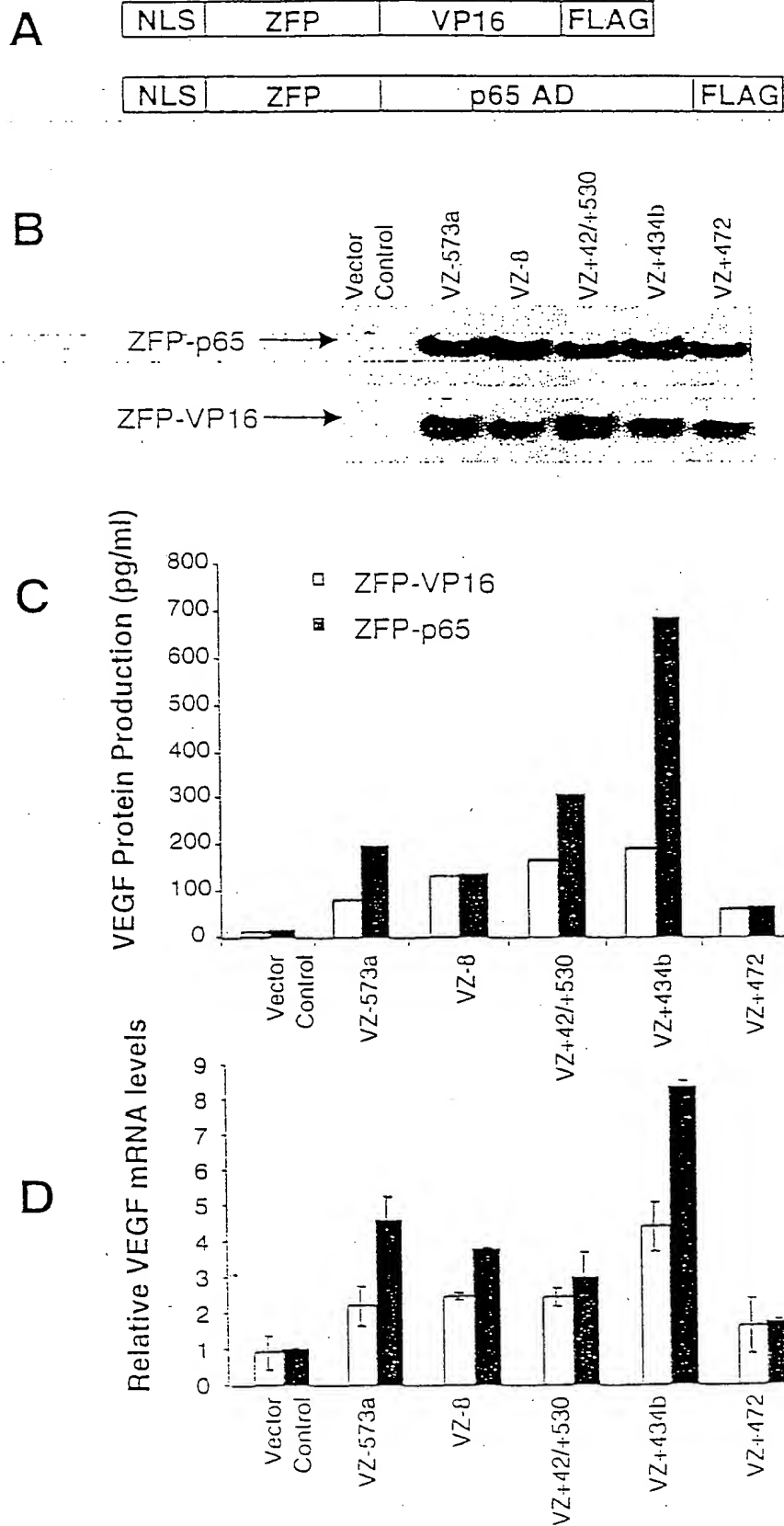


**C**

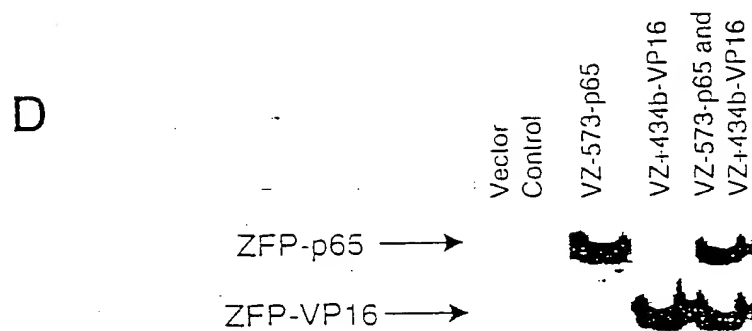
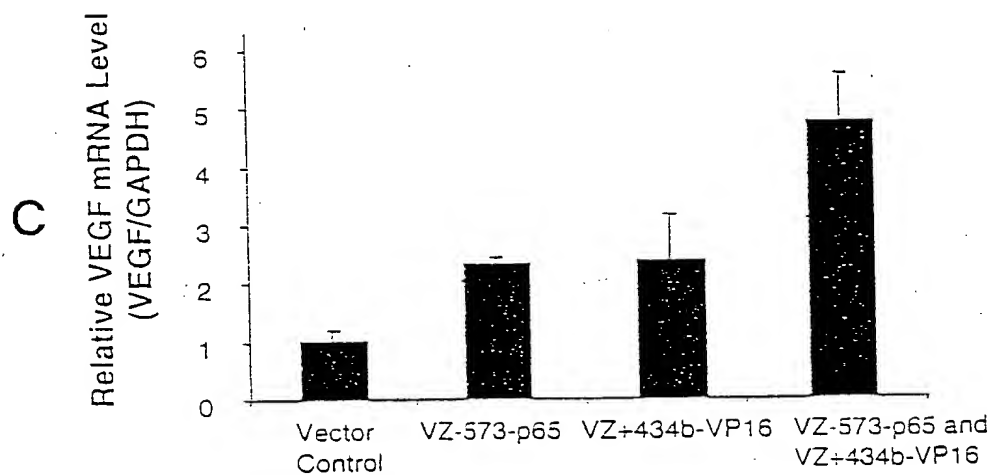
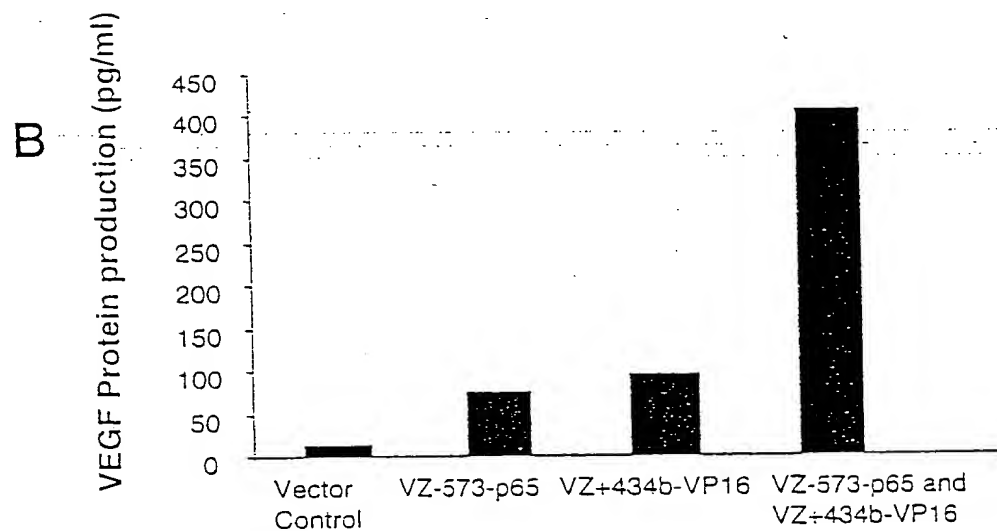
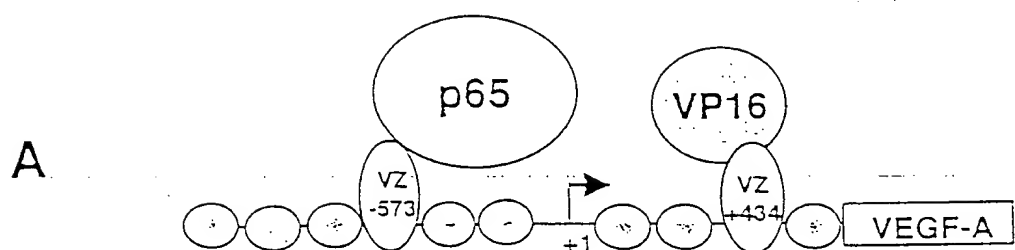




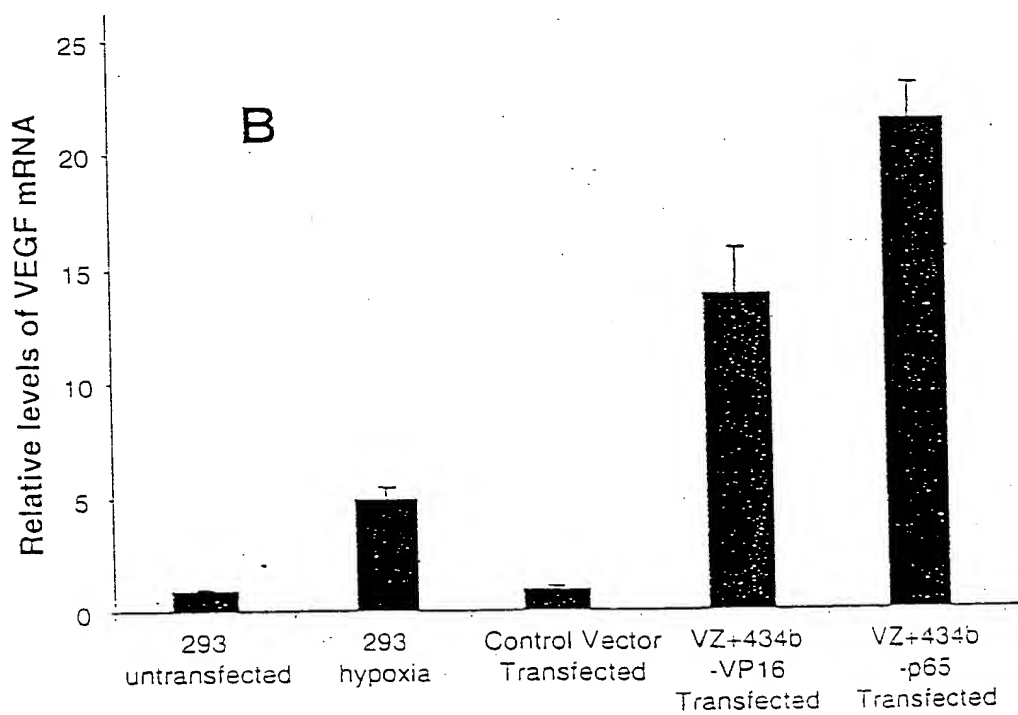
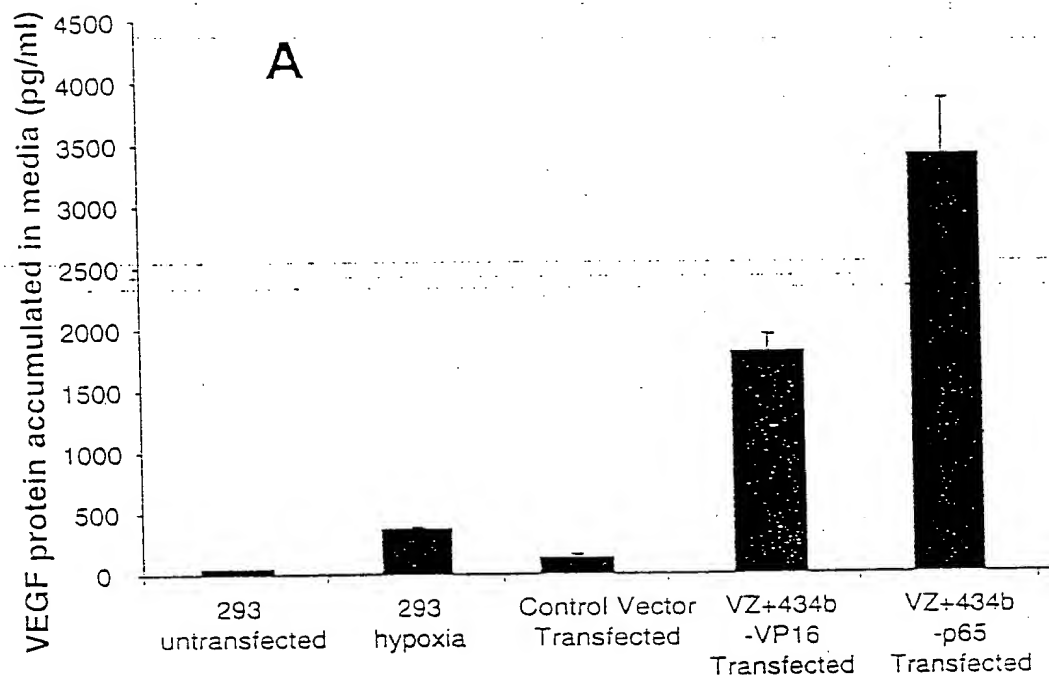
# Figure 5



# Figure 6

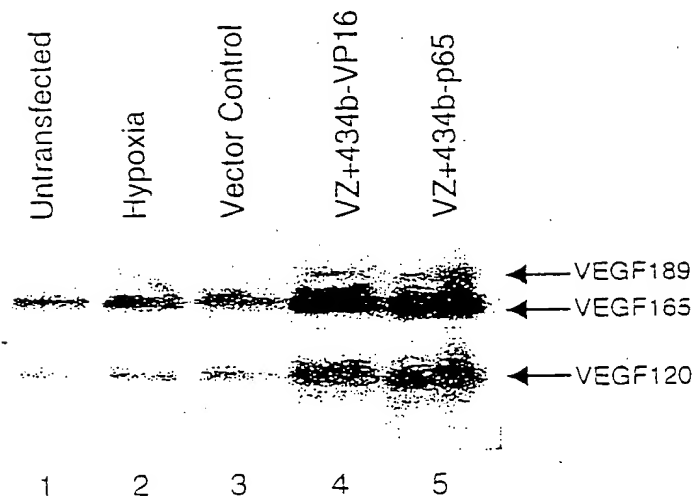


# Figure 7



\_\_\_\_\_

D



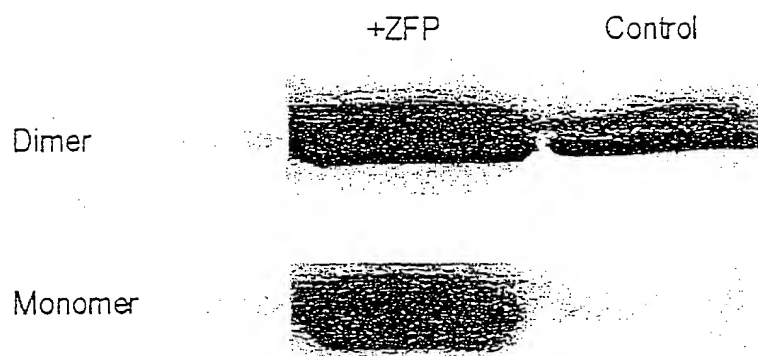


FIG. 8

Control

A.



+ ZFP

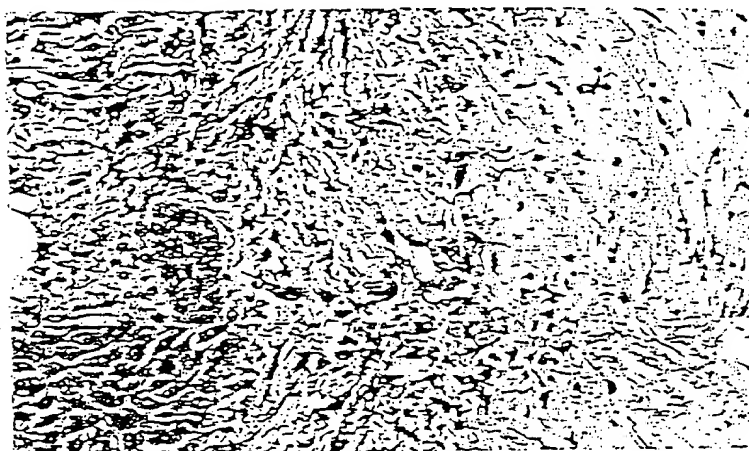
B.



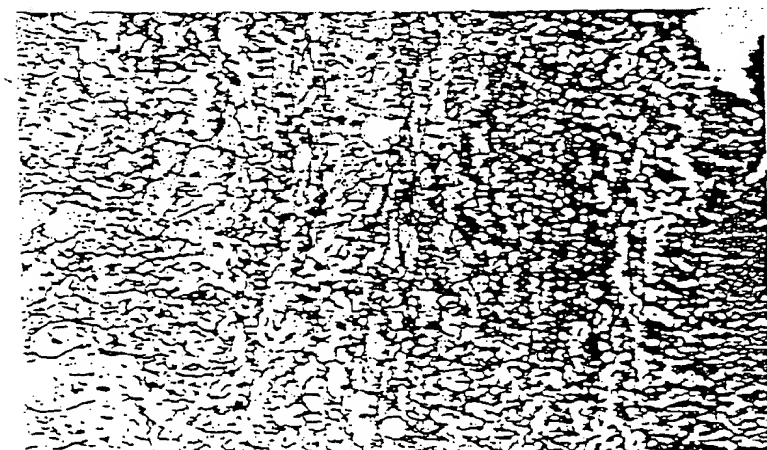
C.



D.



E.

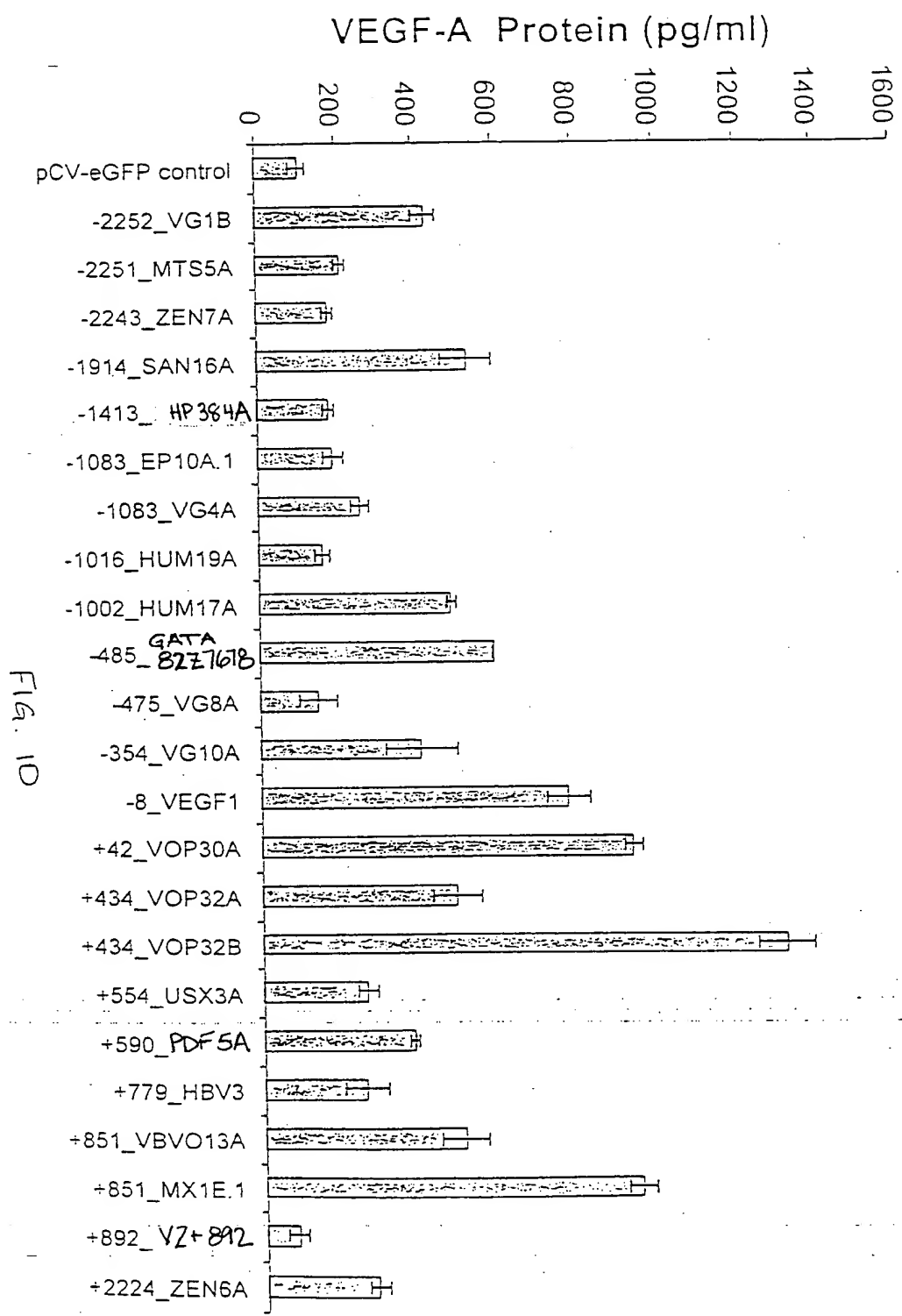


F.



FIG. 9

# Activation of Human VEGF-A Gene By ZFPs in 293 Cells (VEGF-A protein production detected by ELISA)



# Activation of Human VEGF-A Gene by ZFPs (VEGF-A mRNA Detected by Taqman Analysis)

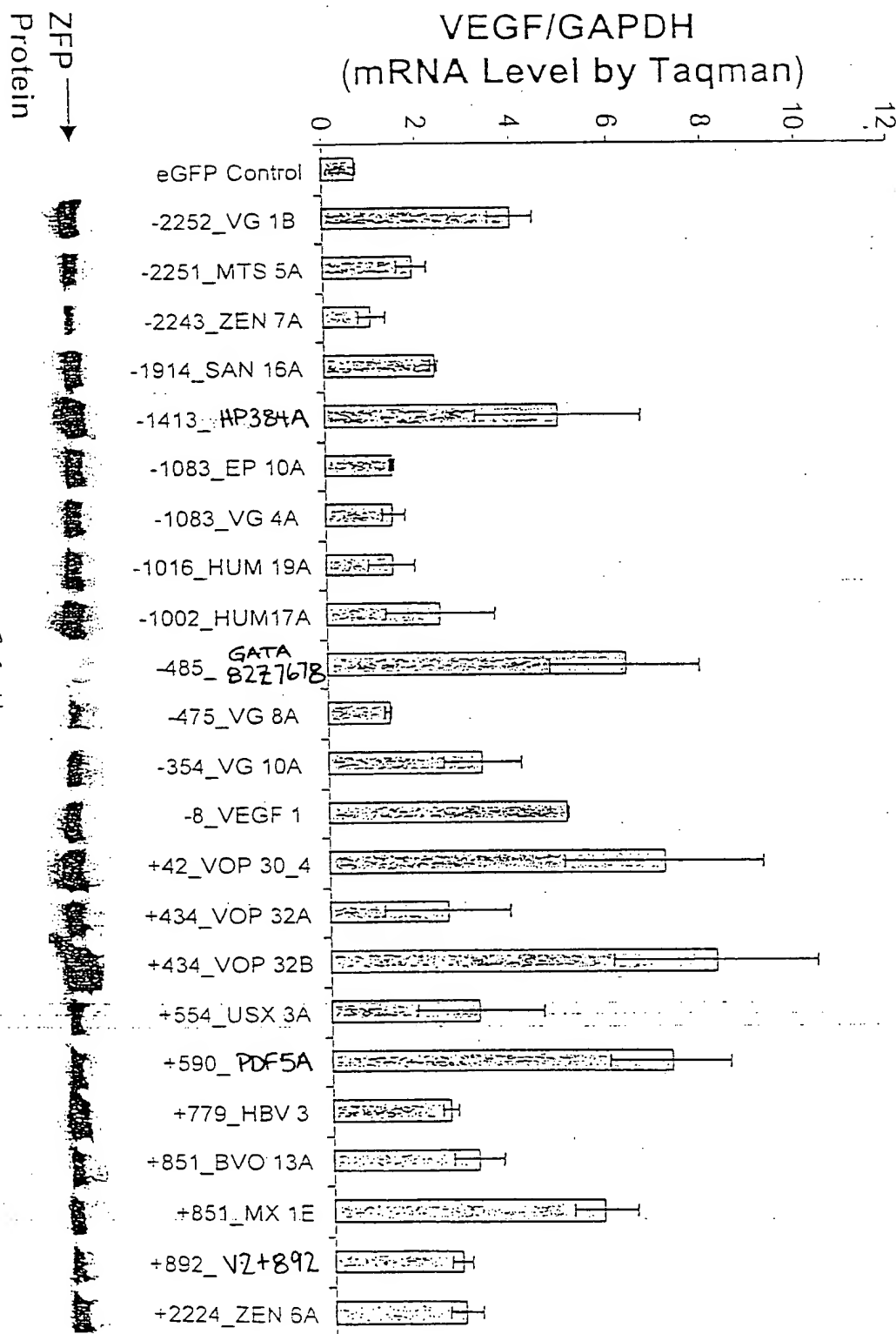
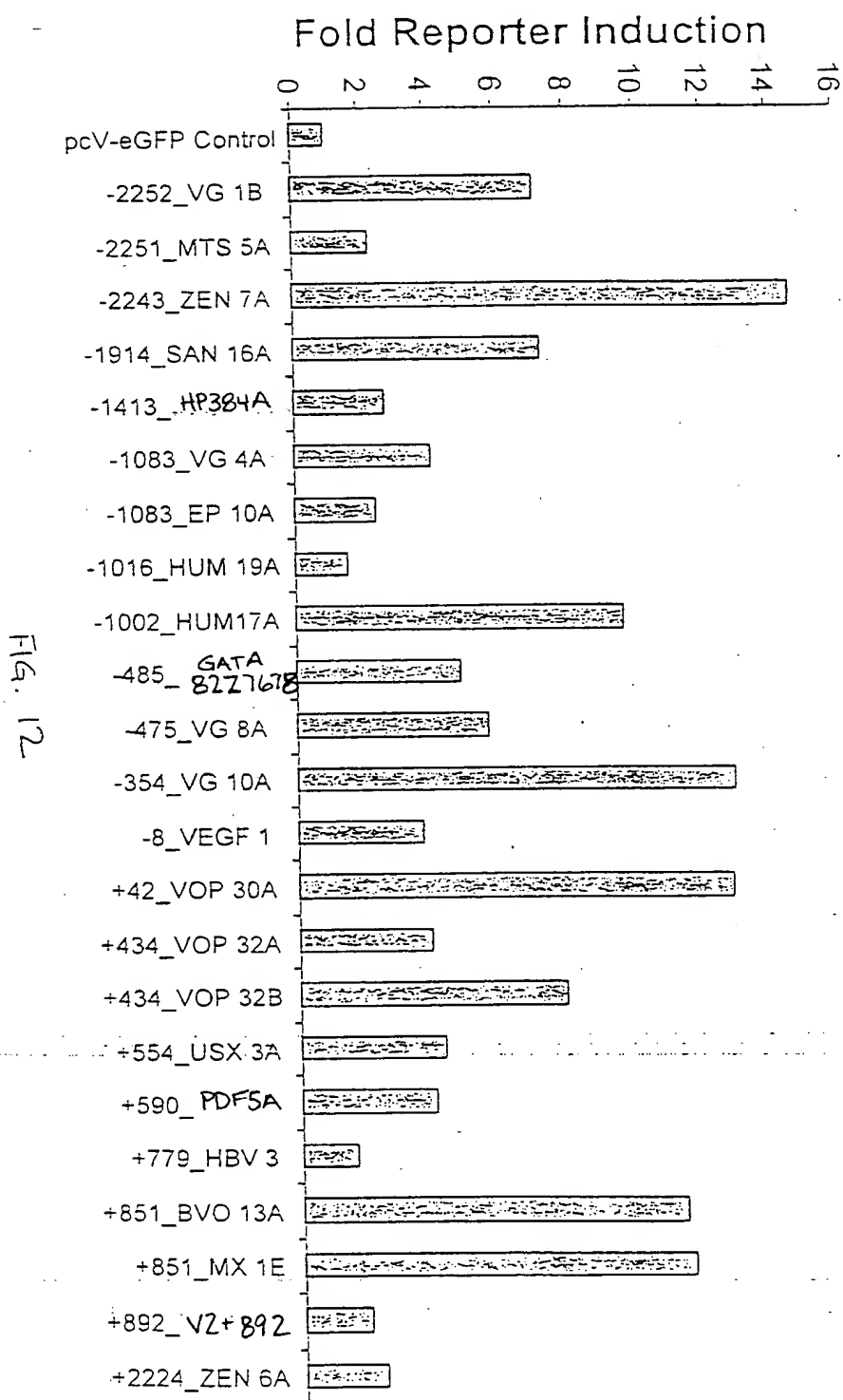


FIG. 11



# Activation of Human VEGF-A Gene Promoter by ZFPs (Activation of VEGF Reporter in 293 cells)



VEGF Activation By ZFP VOP28A and RAT24A in 293 Cells  
(VEGF protein detected by ELISA)

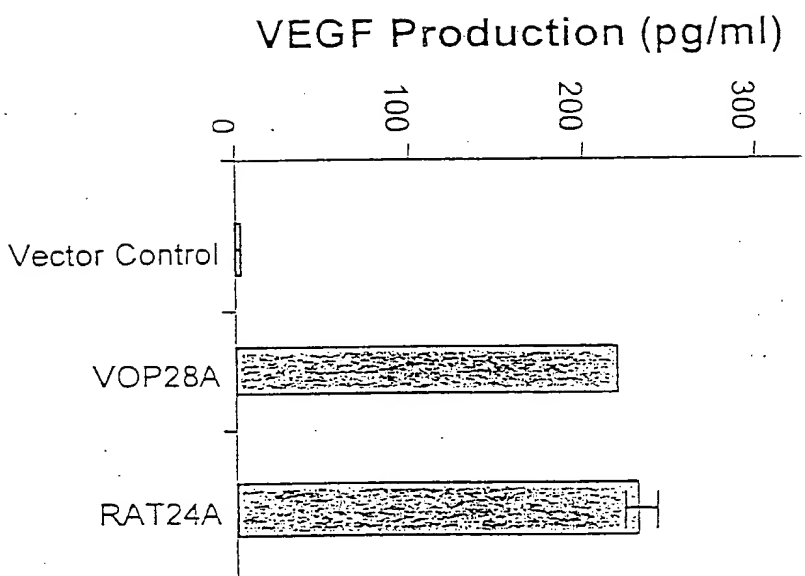
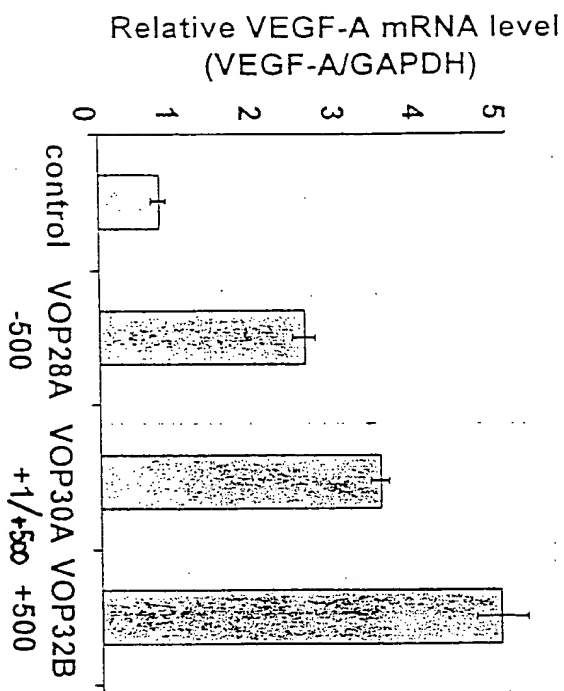


FIG. 13

Figure 14

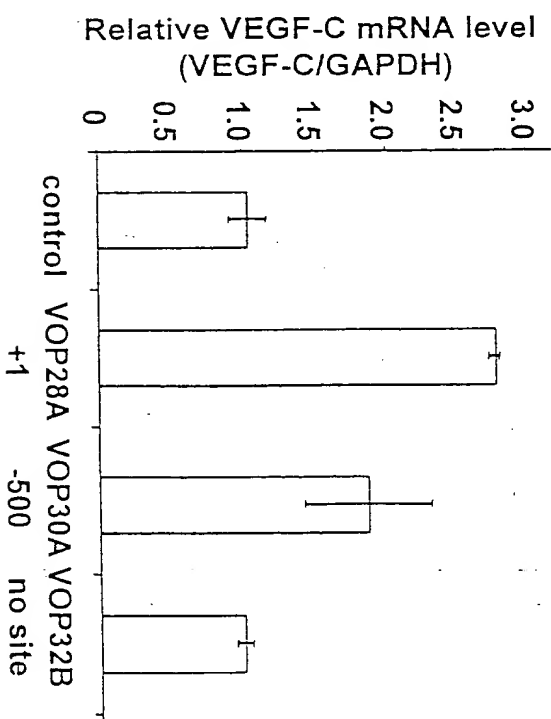
A

VEGF-A mRNA Activation by ZFPs



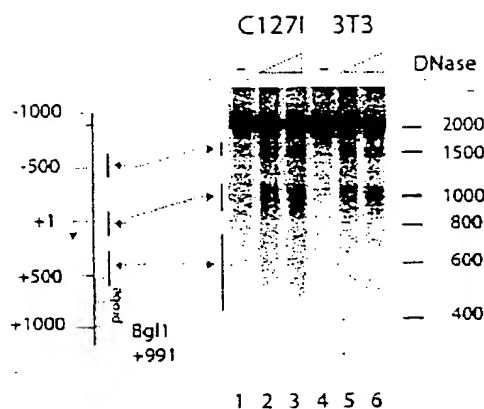
B

VEGF-C mRNA Activation by ZFPs

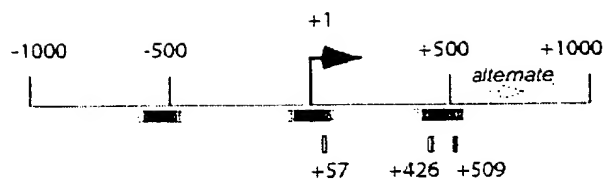


# Figure 15

## A



## B



## C

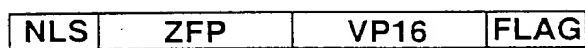
ZFP Name	Target		Finger Designs					
	Sequence 5' - 3'	Subsites 5' - 3'	-1 1 2 3 4 5 6					
mVZ+57	TGAGCGGGCGGCAGCGGAGc	TGAc GCGc GCGc GCAc GCGc GAGc	QSGHLTR	F6	RSDLSR	F5	RSDLTR	F4
			QSGSLTR	F3	RDELQR	F2	RSENLAR	F1
mVZ+426	GGGGGTGACc	GGGc GCTc GACc	RSDHL3R	F3	TSGHLVR	F2	DRSNLTR	F1
mVZ+509	GCTGGGGGCGc	GCTc GGGc GGCc	QSSDLTR	F3	RSDLTR	F2	DRSHLTR	F1

## D

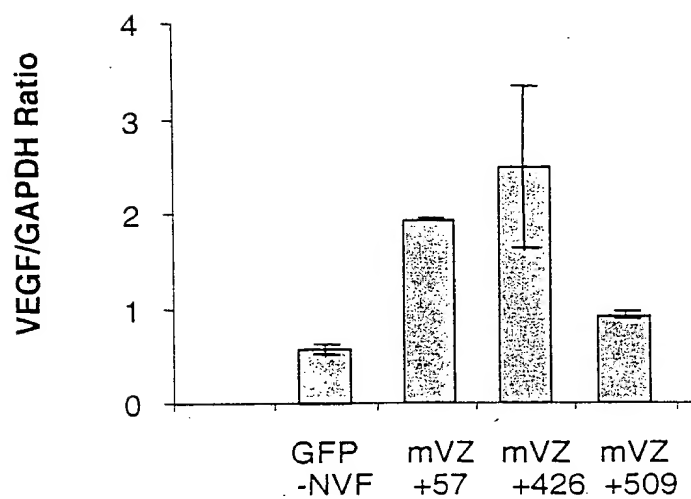
ZFP	Target	Gel Shift		Apparent Kd (nM)
mVZ+57	TGAGCGGCGGCAGCGGAGc		Bound Free	0.031
mVZ+426	GGGGGTGACc		Bound Free	<0.01
mVZ+509	GCTGGGGGCGc		Bound Free	<0.01
SP1	GGGGCGGGGg		Bound Free	0.053

Figure 16

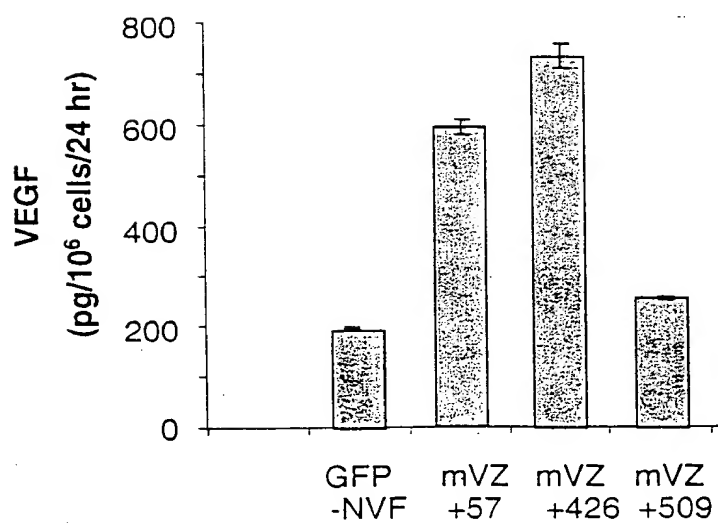
**A**



**B**



**C**



Smooth Muscle Cells Infected With  
Adenovirus Expressing VPO 30A

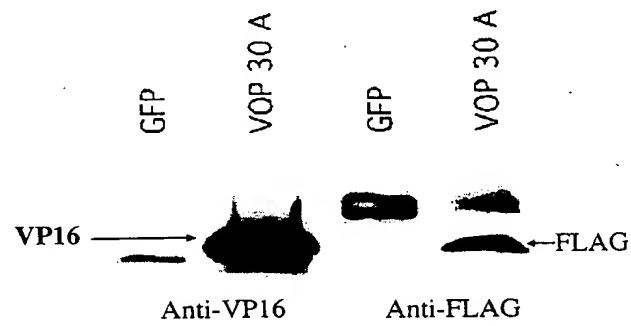


FIG. 17A

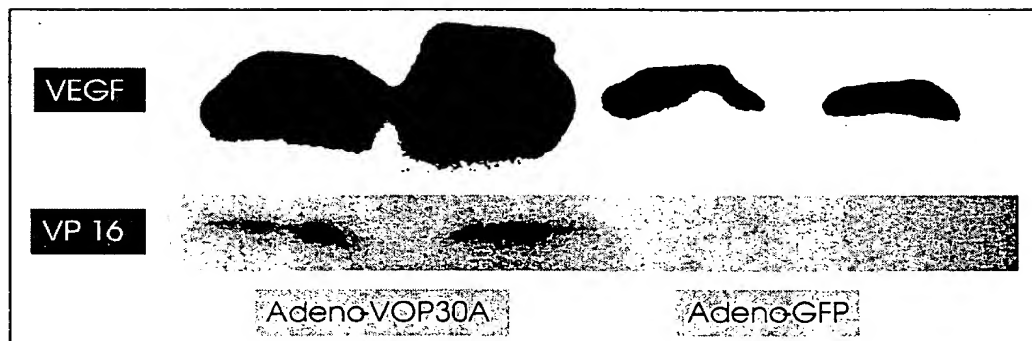


FIG. 17B

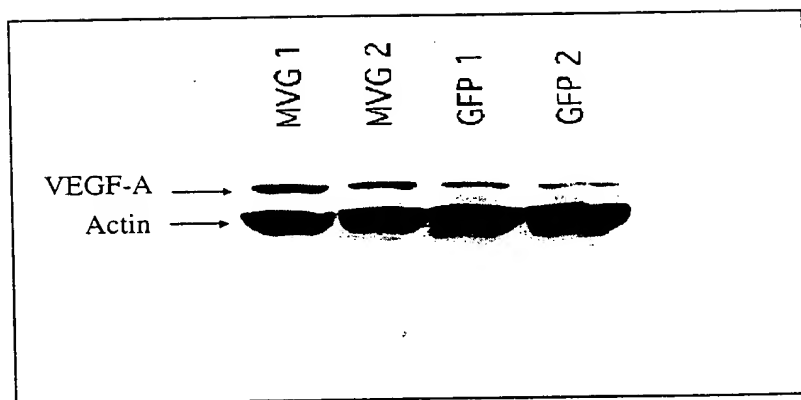


FIG. 17C

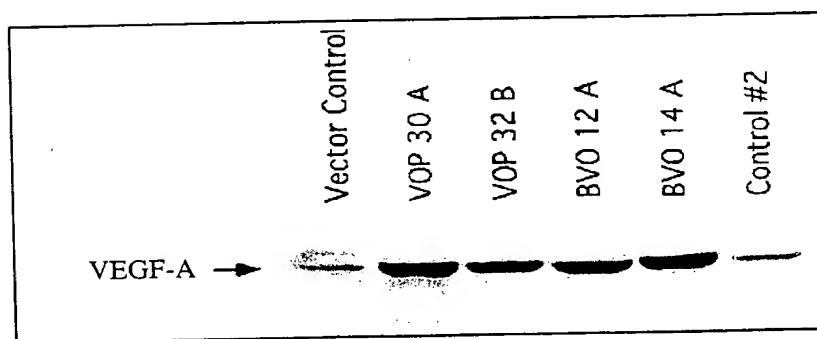


FIG. 17D

A



B



C



D

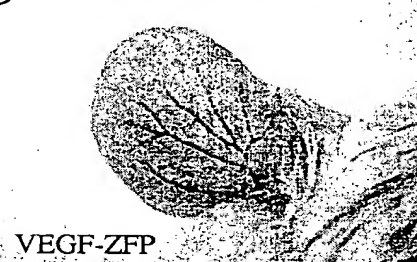


FIG. 18

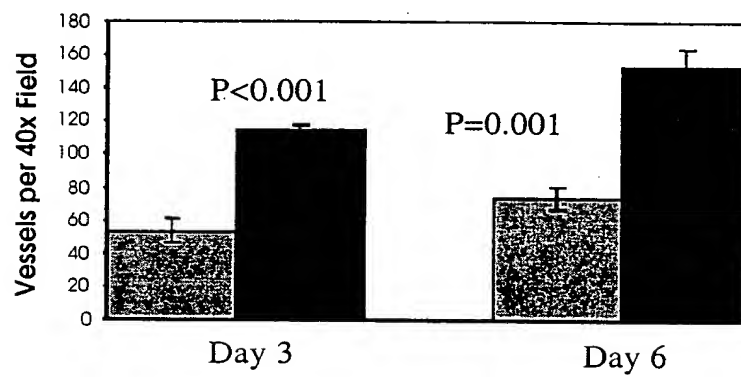


FIG. 18 E



FIG. 19A

GFP



FIG. 19B

MVG

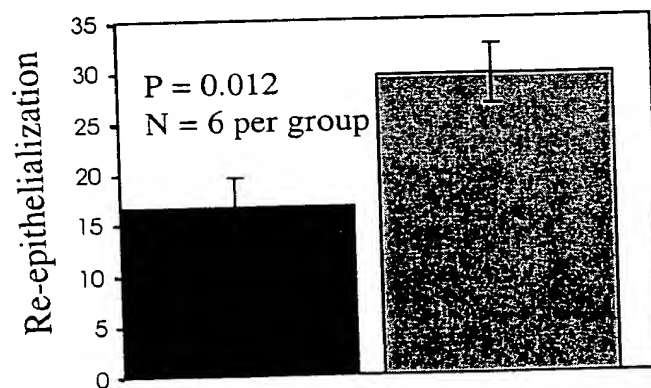


FIG. 19C



VEGF-ZFP (MVG)  
(MVG)

FIG. 20A



GFP Control

FIG. 20B



FIG. 21 A



FIG. 21 B

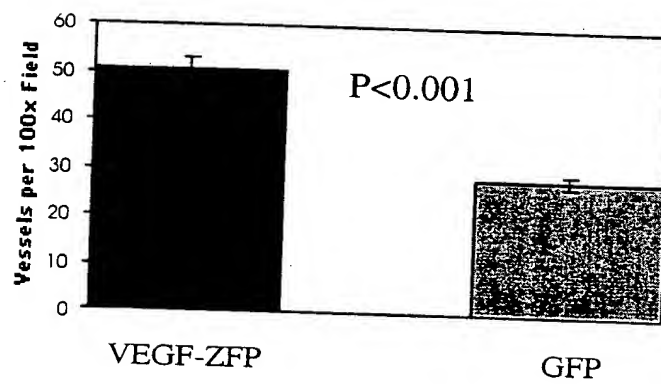


FIG. 21 C